

### Abstract

The objective of this invention is to realize an information processing scheme such that the necessary references, including reference data specifying locations to be accessed in the memory, are found before the program is executed, and each result is stored in a link to the program. Then the locations to be accessed can be specified immediately by the reference data when the program is executed. The program's running time is stabilized and its speed is increased. It is well suited for use in a device which requires real time capability. When a program written in an interpreter language is run, the reference data specifying the locations to be accessed in the memory are extracted and the references are found before the program is executed. The results which are obtained are then linked to the program through the aforesaid reference data. When a program is executed which requires that certain data be referenced and accessed in the memory, the locations to be accessed in the aforesaid memory are specified based on the results linked to the program through these reference data.